

What is claimed is:

1. A method to control input to an alternating current (AC) induction motor from a power supply that comprises steps of:

determining a measure of reactive power (VAR) in two input lines to the motor during a time period; and

maintaining an SSR (solid state relay) connected in series between the power supply and the motor in a non-conducting state for a subsequent time period, the length of which subsequent time period is determined by analyzing the measure of VAR.

2. The method of claim 1 further comprising a step of driving the SSR to be conducting after the subsequent time period.